



[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[NRC-2012-0209]

Guidance on Performing a Seismic Margin Assessment

AGENCY: Nuclear Regulatory Commission.

ACTION: Draft Japan Lessons-Learned Project Directorate guidance; request for comment.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing for public comment the draft Japan Lessons-Learned Project Directorate Interim Staff Guidance (JLD-ISG), JLD-ISG-2012-04, "Guidance on Performing a Seismic Margin Assessment in response to the March 2012 Request for Information Letter." This draft JLD-ISG provides guidance on an acceptable method for licensees to carry out a Seismic Margins Analysis (SMA) method referred to in the seismic portion of a letter requiring recipients (licensees) to submit information under oath and affirmation to the NRC.

DATES: Comments must be filed no later than October 10, 2012. Comments received after this date will be considered, if it is practical to do so, but the NRC staff is able to ensure consideration only for comments received on or before this date.

ADDRESSES: You may access information and comment submissions related to this document, which the NRC possesses and are publically available, by searching on

<http://www.regulations.gov> under Docket ID **NRC-2012-0209**. You may submit comments by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2012-0209**. Address questions about NRC dockets to Carol Gallagher, telephone: 301-492-3668; e-mail: Carol.Gallagher@nrc.gov.
- **Mail comments to:** Cindy Bladey, Chief, Rules, Announcements, and Directives Branch (RADB), Office of Administration, Mail Stop: TWB-05-B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.
- **Fax comments to:** RADB at 301-492-3446.

For additional direction on accessing information and submitting comments, see “Accessing Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

FOR FURTHER INFORMATION CONTACT: Mr. Christopher Gratton, Japan Lessons-Learned Project Directorate, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-1055; e-mail: Christopher.Gratton@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Accessing Information and Submitting Comments

A. Accessing Information

Please refer to Docket ID **NRC-2012-0209** when contacting the NRC about the availability of information regarding this document. You may access information related to this

document, which the NRC possesses and are publically available by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2012-0209**.
- **NRC's Agencywide Document Access and Management System (ADAMS):** You may access publically available documents online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "*ADAMS Public Documents*" and then select "*Begin Web-based ADAMS Search.*" For problems with ADAMS please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The draft JLD-ISG-2012-04 is available under ADAMS Accession No. ML12222A327. The 10 CFR 50.54(f) request letter was issued in March 2012, and can be located under ADAMS Accession No. ML12053A340.
- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room 01-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

B. Submitting Comments

Please include Docket ID **NRC-2012-0209** in the subject line of your comment submission, in order to ensure that the NRC is able to make your comment submission available to the public in this docket.

The NRC cautions you not to include identifying or contact information that you do not want to be publically disclosed in your comment submission. The NRC will post all comment submissions at <http://www.regulations.gov> as well as enter the comment submissions into

ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publically disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment submissions into ADAMS.

II. Background Information

Following the events at the Fukushima Dai-ichi nuclear power plant on March 11, 2011, the NRC established a senior-level agency task force referred to as the Near-Term Task Force (NTTF). The NTTF was tasked with conducting a systematic and methodical review of the NRC regulations and processes and determining if the agency should make additional improvements to those programs in light of the events at Fukushima Dai-ichi. As a result of this review, the NTTF developed a comprehensive set of recommendations, documented in SECY-11-0093, "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan," dated July 12, 2011 (ADAMS Accession No. ML111861807). These recommendations were enhanced by the NRC staff following interactions with stakeholders. Documentation of the staff's efforts is contained in SECY-11-0124, "Recommended Actions To Be Taken Without Delay From the Near-Term Task Force Report," dated September 9, 2011, (ADAMS Accession No. ML11245A158), and SECY-11-0137, "Prioritization of Recommended Actions To Be Taken

in Response to Fukushima Lessons Learned,” dated October 3, 2011 (ADAMS Accession No. ML11269A204).

As directed by the staff requirements memorandum (SRM) for SECY-11-0093, the NRC staff reviewed the NTTF recommendations within the context of the NRC’s existing regulatory framework and considered the various regulatory vehicles available to the NRC to implement the recommendations. The staff’s prioritization of the recommendations was established in SECY-11-0124 and SECY-11-0137.

In March 2012, the NRC issued Request for Information Pursuant to Section 50.54(f) of Title 10 of the *Code of Federal Regulations* (10 CFR), Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident,” hereafter called the “March 12, 2012, 50.54(f) letter.” Enclosure 1 of that letter, “Recommendation 2.1: Seismic,” described the actions related to seismic hazard and risk reassessments to be taken by licensees in response to the letter. Among the actions discussed in Enclosure 1 is an SMA method, which may be appropriate for some plants depending on the outcome of the hazard reassessment phase. Enclosure 1 to the 50.54(f) letter states that the SMA approach should be the NRC SMA approach (e.g.; NUREG/CR-4334. “An Approach to the Quantification of Seismic Margins in Nuclear Power Plants,” issued in August 1985 (ADAMS Accession No. ML090500182), as enhanced for full-scope plants in NUREG-1407, “Procedural and Submittal Guidance for the Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities,” ADAMS Accession No. ML063550238.

This draft JLD-ISG, “Guidance on Performing a Seismic Margin Assessment in Response to the March 2012, Request for Information Letter,” (ADAMS Accession No. ML12222A327) describes the enhancements to the NRC SMA method described in NUREG/CR-4334 needed to meet the objectives of the March 12, 2012, 50.54(f) letter. It

presents staff positions on enhancements to the major elements of the NRC SMA and updates references to allow for use of recent advances in methods and guidance. These guidance documents include the American Society of Mechanical Engineers/American Nuclear Society, "Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications," Standard ASME/ANS RA-Sa-2009, 2009 (hereafter called the ASME/ANS PRA standard) and the Screening, Prioritization, and Implementation document (SPID) currently under development by the Nuclear Energy Institute (with NRC staff input) for NRC endorsement.

Licensees may propose other methods for satisfying these requirements. The NRC staff will review such methods and determine their acceptability on a case-by-case basis.

This guidance, at this time, is only intended to be used for an SMA conducted in response to the 50.54(f) letter, and not for other purposes.

The NRC ISG DC/COL-ISG-020, "Seismic Margin Analysis for New Reactors Based on Probabilistic Risk Assessment" (ADAMS Accession No. ML100491233), remains the NRC's current guidance for application to new reactors. The contents of this draft JLD-ISG have no implications for NRC ISG DC/COL-ISG-020, the ASME/ANS PRA standard, or any other document.

The draft JLD-ISG is not a substitute for the requirements in the March 12, 2012, 50.54(f) letter and compliance with the draft JLD-ISG is not required. This draft JLD-ISG is being issued in draft form for public comment to involve the public in developing the regulatory positions.

Proposed Action

By this action, the NRC is requesting public comments on draft JLD-ISG-2012-04. This draft JLD-ISG proposes guidance related to requirements contained in the seismic portion of the March 12, 2012, 50.54(f) letter. The NRC staff will make a final determination regarding issuance of the JLD-ISG after it considers any public comments received in response to this request.

Dated at Rockville, Maryland, this 4th day of September, 2012.

For the Nuclear Regulatory Commission.

/RA/

David L. Skeen, Director
Japan Lessons-Learned Project Directorate
Office of Nuclear Reactor Regulation